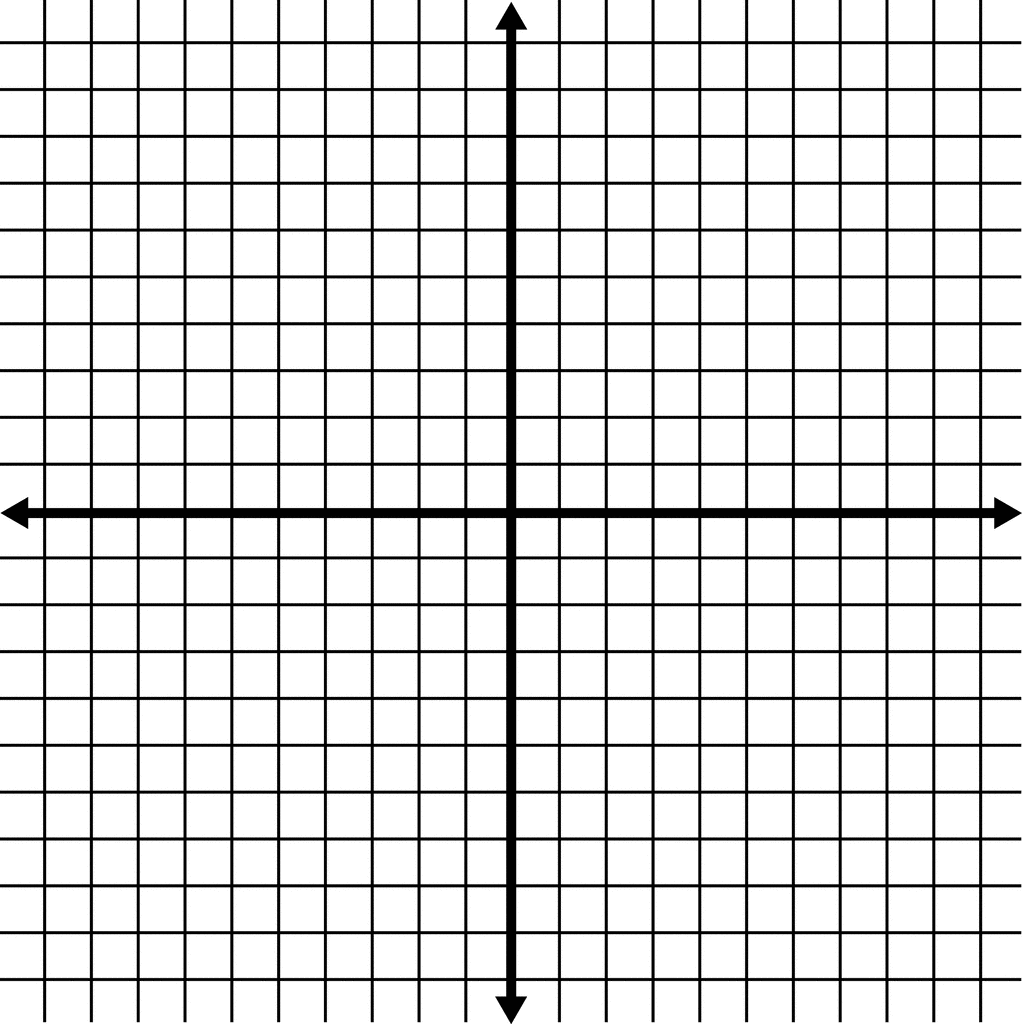
**Algebra 1B Name:**

**Final Exam Study Guide #2 Date:**

1. For the functions f(x) = 2x + 6
   1. f(3)
   2. f(-1)
   3. f(z)
   4. Where does f(x) = 0?

**Solving Inequalities**

1. 
2. 
3. Graph the linear inequality. 



**Writing a function**

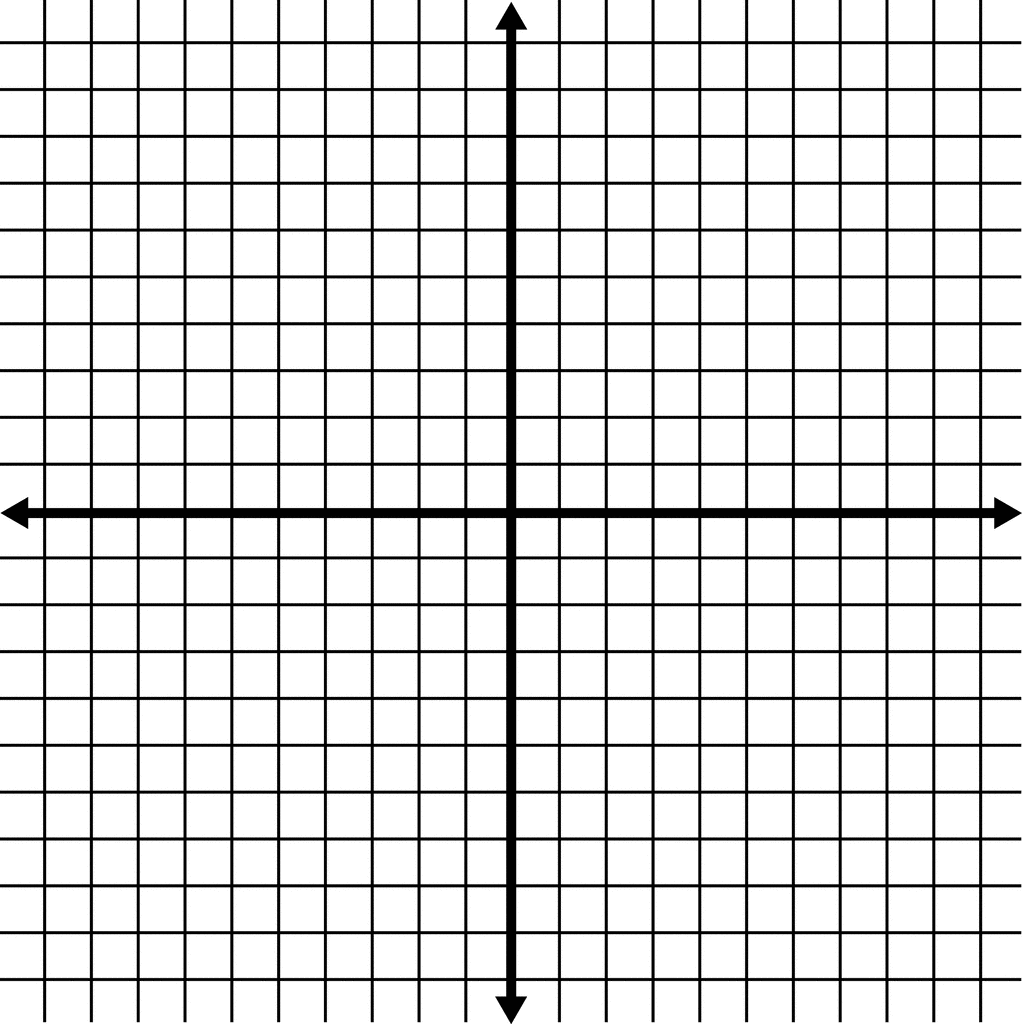
1. What is the function rule?

|  |  |
| --- | --- |
| **x** | **y** |
| 0 | 0 |
| 1 | 3 |
| 2 | 6 |
| 3 | 9 |

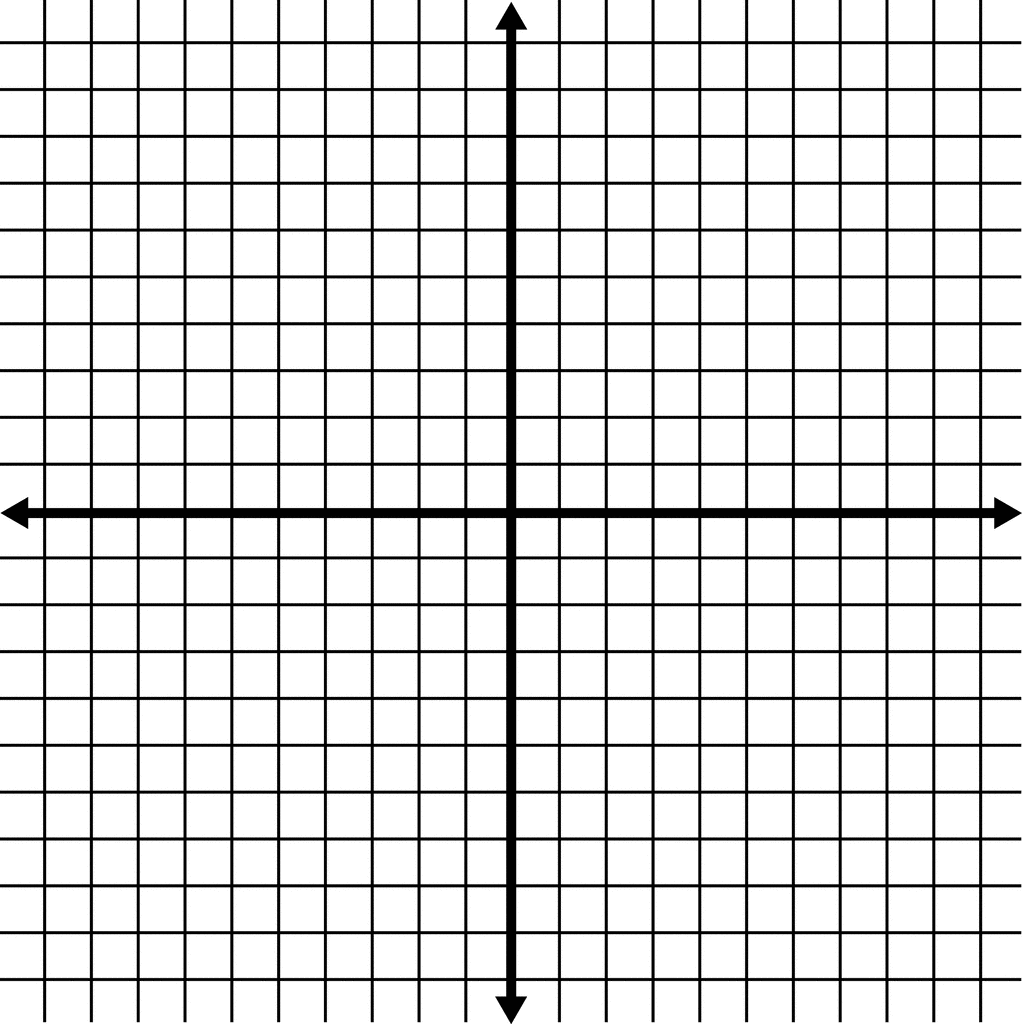
y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Linear Functions**

|  |  |
| --- | --- |
| 1. Find the **slope** of the line containing the points (-5, 2) and (3, 6). | 1. Find the equation of the line that passes through the points (-2, 7) and (2, -3). Graph. |



1. Graph *y* = .
2. Graph - 4x + 3y = 12. Write the equation in slope intercept (y = mx+b) form.



**Systems of Equations**

1. Solve the system of equations using any method you want.





1. Solve the system of equations using any method you want.



1. Mr. Benjamin and Ms. Farrell go shopping! Ms. Farrell buys 4 shirts and 2 sweaters for $71. Mr. Benjamin buys 2 shirts and 3 sweaters for $66.50. How much is a shirt? How much is a sweater?

**Exponent Rules**

1. Use exponent rules to simplify .
2. Use exponent rules to simplify

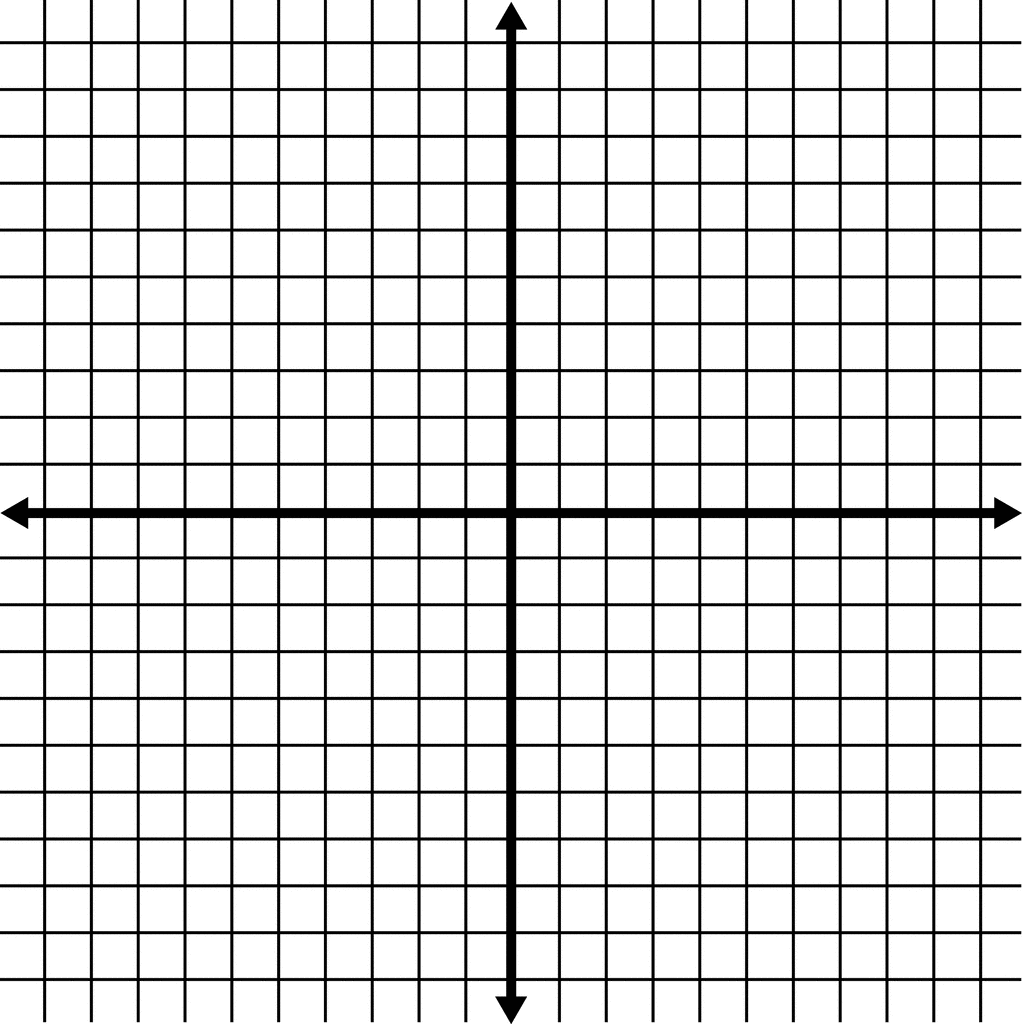
**Polynomials**

1. Combine: 

1. Combine: 
2. Multiply: 
3. Multiply: (x + 3)(6x – 5)
4. Factor out the GCF. 

**Graphing Quadratics**

1. Graph the quadratic



Up or down?

Axis of Symmetry:

Vertex:

Y-intercept:

Any other points

(Plot at least 5 total)